=> fil lreg

FILE 'LREGISTRY' ENTERED AT 11:02:37 ON 16 SEP 2004
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LREGISTRY IS A STATIC LEARNING FILE

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:02:39 ON 16 SEP 2004
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9
DICTIONARY FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 11:02:45 ON 16 SEP 2004
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FILE COVERS 1907 - 16 Sep 2004 VOL 141 ISS 12
FILE LAST UPDATED: 15 Sep 2004 (20040915/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

```
=> fil uspatfull

FILE 'USPATFULL' ENTERED AT 11:02:49 ON 16 SEP 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 14 Sep 2004 (20040914/PD)
FILE LAST UPDATED: 14 Sep 2004 (20040914/ED)
HIGHEST GRANTED PATENT NUMBER: US6792618
HIGHEST APPLICATION PUBLICATION NUMBER: US2004177424
CA INDEXING IS CURRENT THROUGH 14 Sep 2004 (20040914/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 14 Sep 2004 (20040914/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2004
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2004

>>>  USPAT2 is now available.  USPATFULL contains full text of the     <<<
>>>  original, i.e., the earliest published granted patents or         <<<
>>>  applications.  USPAT2 contains full text of the latest US         <<<
>>>  publications, starting in 2001, for the inventions covered in     <<<
>>>  USPATFULL.  A USPATFULL record contains not only the original     <<<
>>>  published document but also a list of any subsequent              <<<
>>>  publications.  The publication number, patent kind code, and      <<<
>>>  publication date for all the US publications for an invention     <<<
>>>  are displayed in the PI (Patent Information) field of USPATFULL   <<<
>>>  records and may be searched in standard search fields, e.g., /PN, <<<
>>>  /PK, etc.                                                         <<<

>>>  USPATFULL and USPAT2 can be accessed and searched together        <<<
>>>  through the new cluster USPATALL.  Type FILE USPATALL to          <<<
>>>  enter this cluster.                                               <<<
>>>                                                                    <<<
>>>  Use USPATALL when searching terms such as patent assignees,       <<<
>>>  classifications, or claims, that may potentially change from      <<<
>>>  the earliest to the latest publication.                           <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> fil toxcenter

FILE 'TOXCENTER' ENTERED AT 11:02:54 ON 16 SEP 2004
COPYRIGHT (C) 2004 ACS


FILE COVERS 1907 TO 14 Sep 2004 (20040914/ED)

This file contains CAS Registry Numbers for easy and accurate substance
identification.

TOXCENTER has been enhanced with new files segments and search fields.
See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the
MeSH 2004 vocabulary.  See http://www.nlm.nih.gov/mesh/ and
http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html for a
description of changes.

=> FIL STNGUIDE


FILE 'STNGUIDE' ENTERED AT 11:02:57 ON 16 SEP 2004
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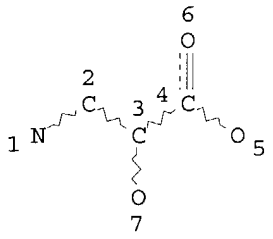
FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 10, 2004 (20040910/UP).

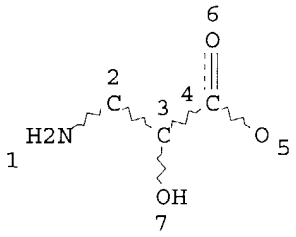
=> d que l11
L1 ( 1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-635342/AP,PRN
L2 SEL PLU=ON L1 1- RN : 90 TERMS
L3 90 SEA FILE=REGISTRY ABB=ON PLU=ON L2
L4 STR




NODE ATTRIBUTES:
NSPEC IS RC AT 1
NSPEC IS RC AT 5
CONNECT IS E1 RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

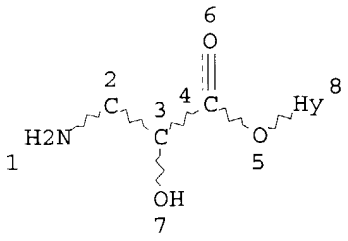
STEREO ATTRIBUTES: NONE
L5 ( 11594) SEA FILE=REGISTRY SSS FUL L4
L6 STR




NODE ATTRIBUTES:
NSPEC IS RC AT 5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE
L7 ( 827) SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L8 STR

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NODE ATTRIBUTES:
NSPEC   IS RC     AT   5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   8

STEREO ATTRIBUTES: NONE
L9  (        98)SEA FILE=REGISTRY SUB=L7 SSS FUL L8
L10          729 SEA FILE=REGISTRY ABB=ON  PLU=ON  L7 NOT L9
L11           30 SEA FILE=REGISTRY ABB=ON  PLU=ON  L3 AND L10


=> d l12
L12          ANALYZE L11 1- LC :       5 TERMS

TERM #    # OCC  # DOC  % DOC LC
------ ------- ------ ------ ---------------
     1       30     30 100.00 CA
     2       30     30 100.00 CAPLUS
     3       30     30 100.00 TOXCENTER
     4       30     30 100.00 USPATFULL
     5        1      1   3.33 CASREACT
*********  END OF L12***


=> d que l13 nos
L1  (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  US2003-635342/AP,PRN
L2              SEL  PLU=ON  L1 1- RN :      90 TERMS
L3            90 SEA FILE=REGISTRY ABB=ON  PLU=ON  L2
L4              STR
L5  (     11594)SEA FILE=REGISTRY SSS FUL L4
L6              STR
L7  (       827)SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L8              STR
L9  (        98)SEA FILE=REGISTRY SUB=L7 SSS FUL L8
L10          729 SEA FILE=REGISTRY ABB=ON  PLU=ON  L7 NOT L9
L11           30 SEA FILE=REGISTRY ABB=ON  PLU=ON  L3 AND L10
L13            6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11


=> d que l14 nos
L1  (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  US2003-635342/AP,PRN
L2              SEL  PLU=ON  L1 1- RN :      90 TERMS
L3            90 SEA FILE=REGISTRY ABB=ON  PLU=ON  L2
L4              STR
L5  (     11594)SEA FILE=REGISTRY SSS FUL L4
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L6              STR
L7   (       827)SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L8              STR
L9   (        98)SEA FILE=REGISTRY SUB=L7 SSS FUL L8
L10          729 SEA FILE=REGISTRY ABB=ON  PLU=ON  L7 NOT L9
L11           30 SEA FILE=REGISTRY ABB=ON  PLU=ON  L3 AND L10
L14            4 SEA FILE=USPATFULL ABB=ON  PLU=ON  L11


=> d que l15 nos
L1   (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  US2003-635342/AP,PRN
L2              SEL  PLU=ON  L1 1- RN :      90 TERMS
L3            90 SEA FILE=REGISTRY ABB=ON  PLU=ON  L2
L4              STR
L5   (     11594)SEA FILE=REGISTRY SSS FUL L4
L6              STR
L7   (       827)SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L8              STR
L9   (        98)SEA FILE=REGISTRY SUB=L7 SSS FUL L8
L10          729 SEA FILE=REGISTRY ABB=ON  PLU=ON  L7 NOT L9
L11           30 SEA FILE=REGISTRY ABB=ON  PLU=ON  L3 AND L10
L15            3 SEA FILE=TOXCENTER ABB=ON  PLU=ON  L11


=> dup rem l13 l14 l15

FILE 'HCAPLUS' ENTERED AT 11:04:21 ON 16 SEP 2004
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FILE 'USPATFULL' ENTERED AT 11:04:21 ON 16 SEP 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'TOXCENTER' ENTERED AT 11:04:21 ON 16 SEP 2004
COPYRIGHT (C) 2004 ACS
PROCESSING COMPLETED FOR L13
PROCESSING COMPLETED FOR L14
PROCESSING COMPLETED FOR L15
L85            8 DUP REM L13 L14 L15 (5 DUPLICATES REMOVED)
                ANSWERS '1-6' FROM FILE HCAPLUS
                ANSWERS '7-8' FROM FILE USPATFULL

=> d ibib hitstr abs retable

L85  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2004 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2004:120817  HCAPLUS
DOCUMENT NUMBER:          140:164234
TITLE:                    Preparation of 3-amino-2-hydroxyalkanoic acids and
                          their prodrugs
INVENTOR(S):              Bamaung, Nwe Y.; Craig, Richard A.; Henkin, Jack;
                          Kawai, Megumi; Searle, Xenia B.; Sheppard, George S.;
                          Wang, Jieyi
PATENT ASSIGNEE(S):       Abbott Laboratories, USA
SOURCE:                   PCT Int. Appl., 44 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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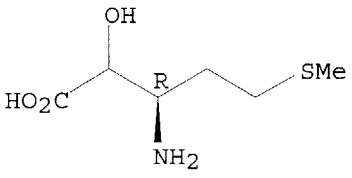
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004013085 | A1 | 20040212 | WO 2003-US24396 | 20030805 |

W: CA, JP, MX
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

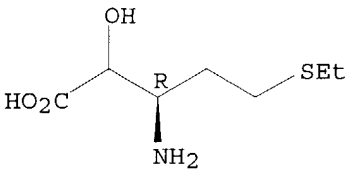
PRIORITY APPLN. INFO.: US 2002-213655 A 20020806
OTHER SOURCE(S): MARPAT 140:164234
IT **248928-74-7P 369360-56-5P 656833-28-2P**
**656833-29-3P 656833-30-6P 656833-31-7P**
**656833-32-8P 656833-33-9P 656833-34-0P**
**656833-35-1P 656833-36-2P 656833-37-3P**
**656833-38-4P 656833-39-5P 656833-40-8P**
**656833-41-9P 656833-42-0P 656833-43-1P**
**656833-44-2P 656833-45-3P 656833-46-4P**
**656833-47-5P 656833-48-6P 656833-49-7P**
**656833-50-0P 656833-51-1P 656833-52-2P**
**656833-53-3P 656833-54-4P 656833-88-4P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminohydroxyalkanoic acids and prodrugs)
RN 248928-74-7 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-methyl-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



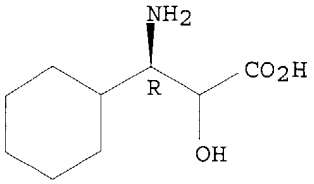

RN 369360-56-5 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



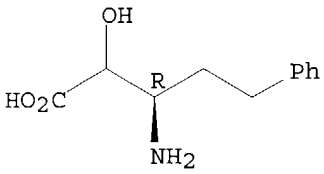

RN 656833-28-2 HCAPLUS
CN Cyclohexanepropanoic acid, β-amino-α-hydroxy-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



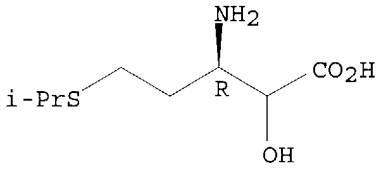
RN 656833-29-3 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4,5-trideoxy-5-phenyl-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



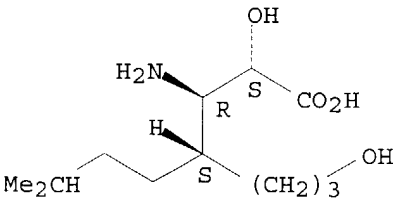
RN 656833-30-6 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



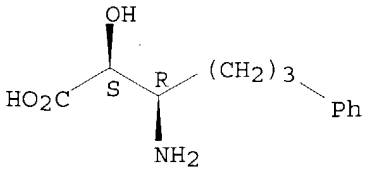
RN 656833-31-7 HCAPLUS
CN L-xylo-Heptonic acid, 3-amino-3,4,5,6-tetradeoxy-4-(3-methylbutyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



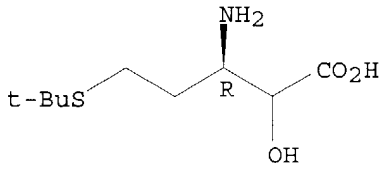
RN 656833-32-8 HCAPLUS
CN Benzenehexanoic acid, β-amino-α-hydroxy-, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



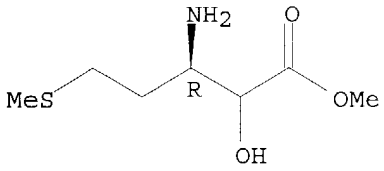
RN 656833-33-9 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1,1-dimethylethyl)-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



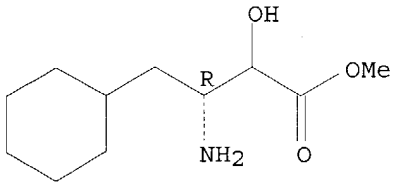
RN 656833-34-0 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-methyl-5-thio-, methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



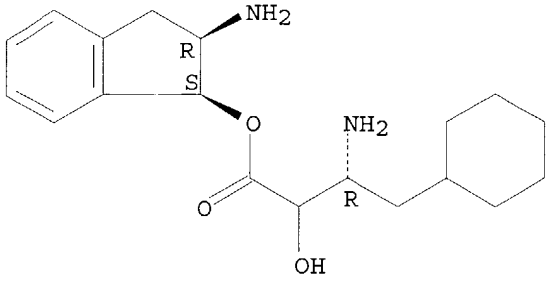
RN 656833-35-1 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, methyl ester, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



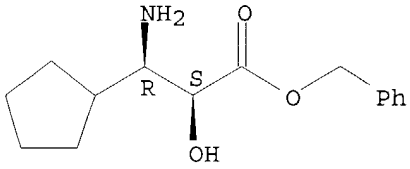
RN 656833-36-2 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, (1S,2R)-2-amino-2,3-dihydro-1H-inden-1-yl ester, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



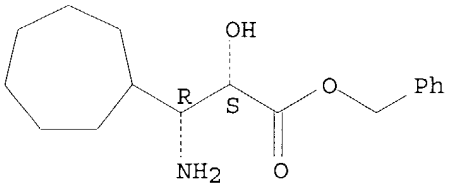
RN 656833-37-3 HCAPLUS
CN Cyclopentanepropanoic acid, β-amino-α-hydroxy-, phenylmethyl ester, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



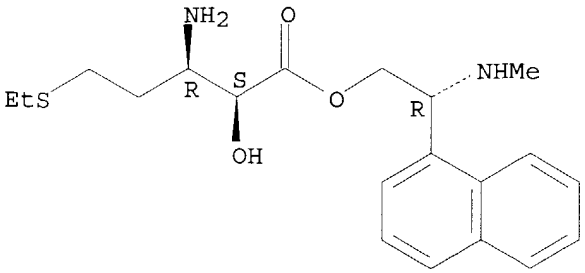
RN 656833-38-4 HCAPLUS
CN Cycloheptanepropanoic acid, β-amino-α-hydroxy-, phenylmethyl ester, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



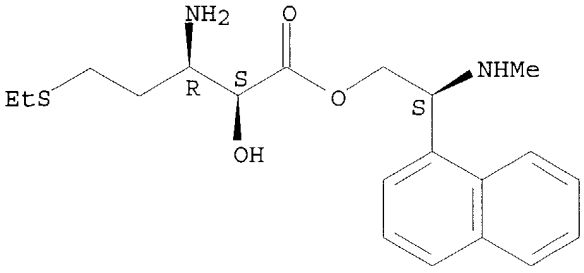
RN 656833-39-5 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2R)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



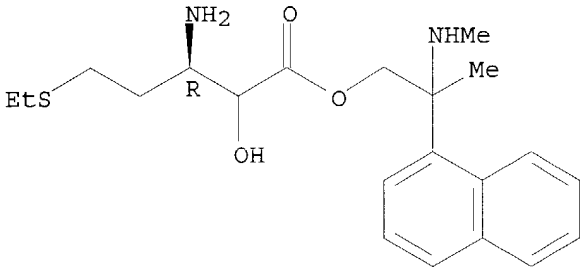
RN 656833-40-8 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2S)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



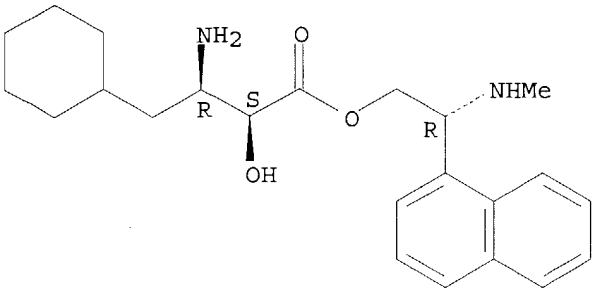

RN 656833-41-9 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, 2-(methylamino)-2-(1-naphthalenyl)propyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



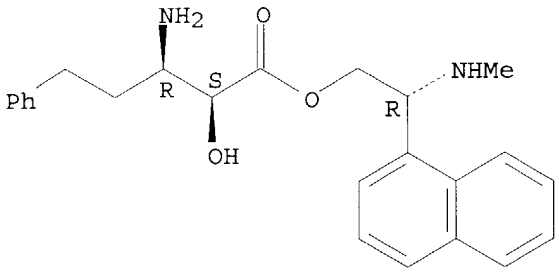

RN 656833-42-0 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, (2R)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



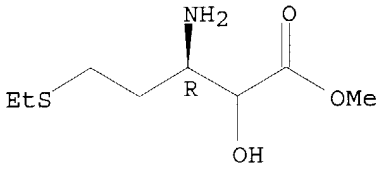

RN 656833-43-1 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4,5-trideoxy-5-phenyl-, (2R)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



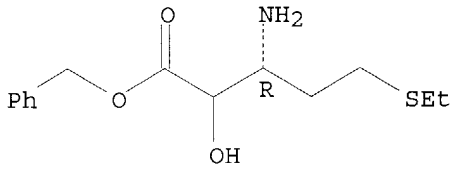

RN 656833-44-2 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



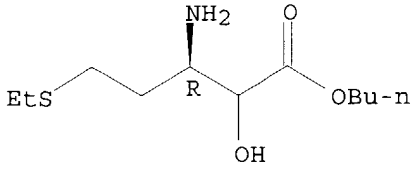

RN 656833-45-3 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, phenylmethyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



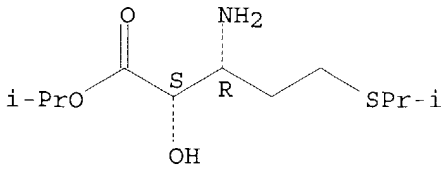

RN 656833-46-4 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, butyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



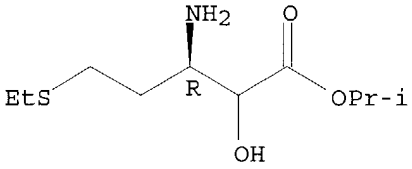

RN 656833-47-5 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



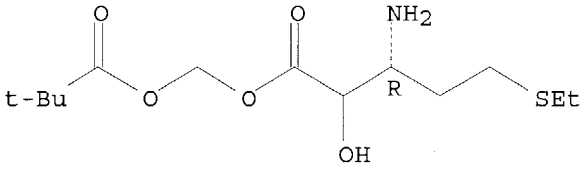

RN 656833-48-6 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, 1-methylethyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



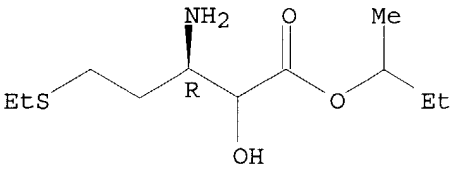

RN 656833-49-7 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2,2-dimethyl-1-oxopropoxy)methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



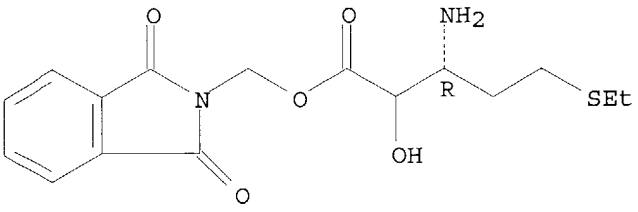

RN 656833-50-0 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, 1-methylpropyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



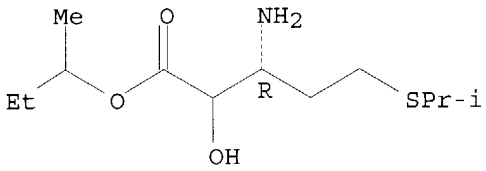

RN 656833-51-1 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



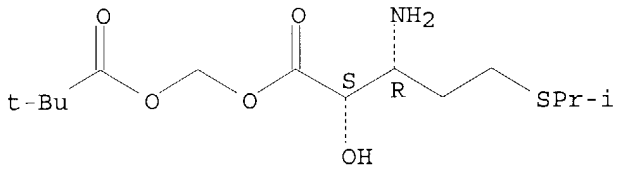
RN 656833-52-2 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, 1-methylpropyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



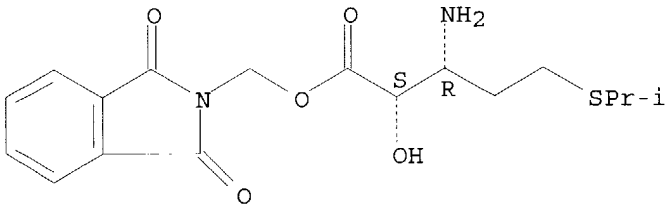
RN 656833-53-3 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, (2,2-dimethyl-1-oxopropoxy)methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



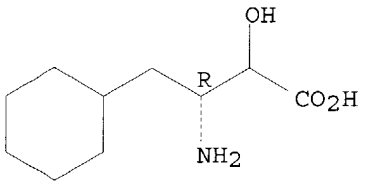
RN 656833-54-4 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 656833-88-4 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




AB β-Amino acid derivs. H2NCHR1CH(OH)CO2R2 [R1 is alkyl, alkylthioalkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocyclylalkyl, or hydroxyalkyl; R2 is H, alkenyl, alkyl, alkylcarbonyloxyalkyl, alkylcarbonylalkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, or heterocyclylalkyl] or their therapeutically-acceptable salts were prepared for use in treating conditions which arise from or are exacerbated by angiogenesis. Pharmaceutical compns. containing these compds. are used in methods for inhibiting angiogenesis and treating cancer. Thus, (2RS,3R)-3-amino-2-hydroxy-5-(methylthio)pentanoic acid was prepared from Boc-D-Met-OH (Boc = tert-butoxycarbonyl) by reduction with sodium bis(2-methoxyethoxy)aluminum hydride (Red-Al), oxidation of the formed hydroxymethyl group with sulfur trioxide pyridine complex, reaction with KCN and in situ hydrolysis of the cyanohydrin with 12 M HCl.

=> d ibib hitstr abs retable 2-6

L85 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2004:513345 HCAPLUS
DOCUMENT NUMBER: 141:59732
TITLE: 3-Amino-2-hydroxyalkanoic acids and their prodrugs
INVENTOR(S): Bamaung, Nwe Y.; Craig, Richard A.; Henkin, Jack; Kawai, Megumi; Searle, Xenia B.; Sheppard, George S.; Wang, Jieyi
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

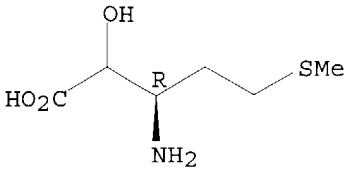
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 2004122098 | A1 | 20040624 | US 2003-635342 | | 20030806 |
| PRIORITY APPLN. INFO.: | | | US 2002-401317P | P | 20020806 |

OTHER SOURCE(S): MARPAT 141:59732
IT **248928-74-7P 369360-56-5P 656833-28-2P**
**656833-29-3P 656833-30-6P 656833-31-7P**
**656833-32-8P 656833-33-9P 656833-34-0P**
**656833-35-1P 656833-36-2P 656833-37-3P**
**656833-38-4P 656833-39-5P 656833-40-8P**
**656833-41-9P 656833-42-0P 656833-43-1P**
**656833-44-2P 656833-45-3P 656833-46-4P**
**656833-47-5P 656833-48-6P 656833-49-7P**
**656833-50-0P 656833-51-1P 656833-52-2P**
**656833-53-3P 656833-54-4P 656833-88-4P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 3-amino-2-hydroxyalkanoic acids and their prodrugs for

treating conditions which arise from or are exacerbated by angiogenesis)

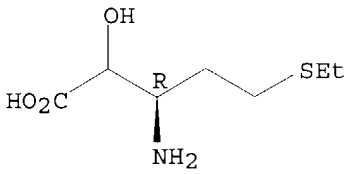
RN 248928-74-7 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-methyl-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



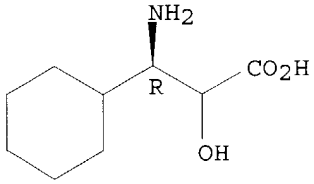

RN 369360-56-5 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



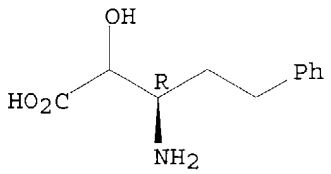

RN 656833-28-2 HCAPLUS
CN Cyclohexanepropanoic acid, β-amino-α-hydroxy-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




RN 656833-29-3 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4,5-trideoxy-5-phenyl-, (2ξ)- (9CI) (CA INDEX NAME)

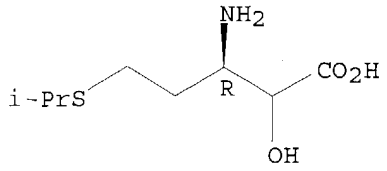
Absolute stereochemistry.




RN 656833-30-6 HCAPLUS

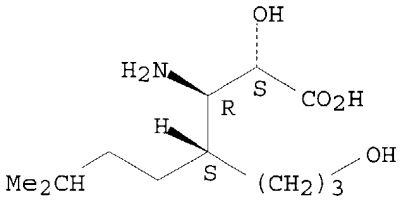
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



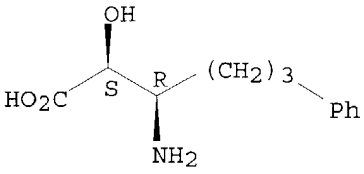

RN 656833-31-7 HCAPLUS
CN L-xylo-Heptonic acid, 3-amino-3,4,5,6-tetradeoxy-4-(3-methylbutyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



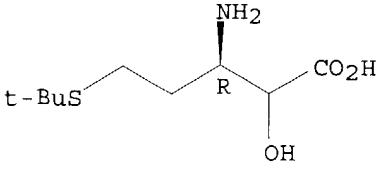

RN 656833-32-8 HCAPLUS
CN Benzenehexanoic acid, β-amino-α-hydroxy-, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



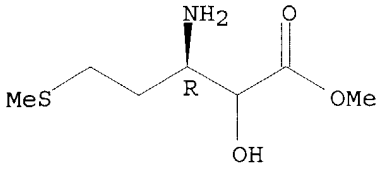

RN 656833-33-9 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1,1-dimethylethyl)-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



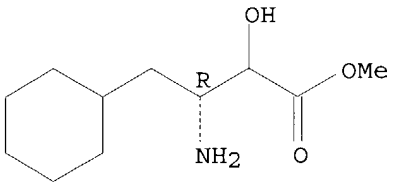

RN 656833-34-0 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-methyl-5-thio-, methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



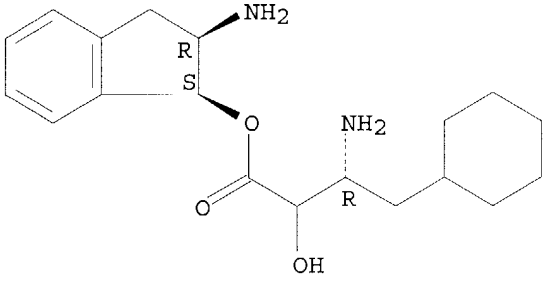

RN 656833-35-1 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, methyl ester, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



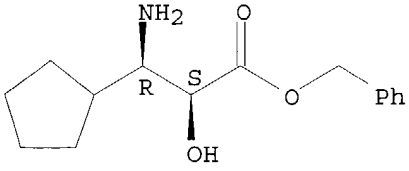

RN 656833-36-2 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, (1S,2R)-2-amino-2,3-dihydro-1H-inden-1-yl ester, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




RN 656833-37-3 HCAPLUS
CN Cyclopentanepropanoic acid, β-amino-α-hydroxy-, phenylmethyl ester, (αS,βR)- (9CI) (CA INDEX NAME)

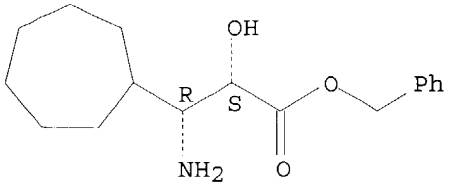
Absolute stereochemistry.




RN 656833-38-4 HCAPLUS
CN Cycloheptanepropanoic acid, β-amino-α-hydroxy-, phenylmethyl

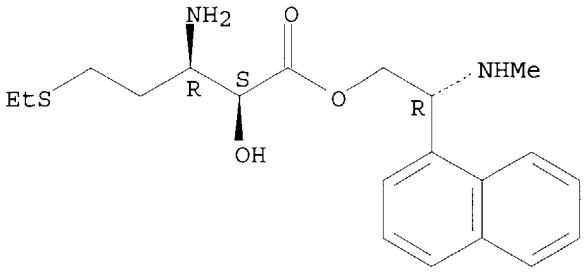
ester, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



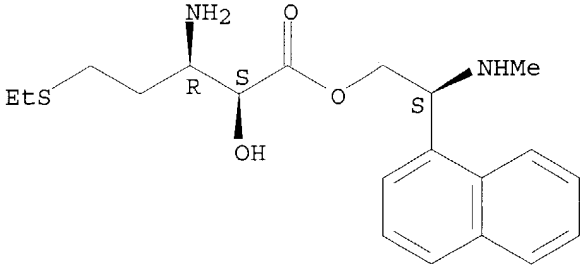

RN 656833-39-5 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2R)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



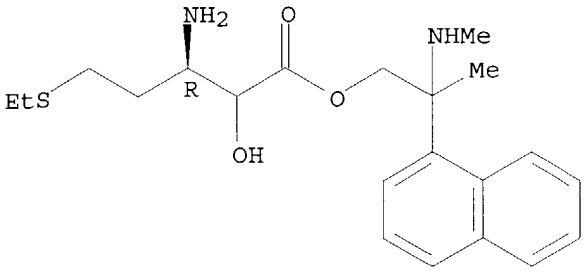

RN 656833-40-8 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2S)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



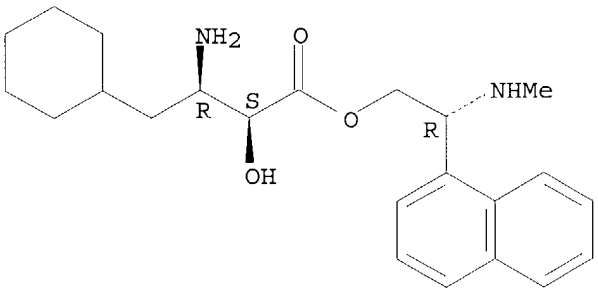

RN 656833-41-9 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, 2-(methylamino)-2-(1-naphthalenyl)propyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



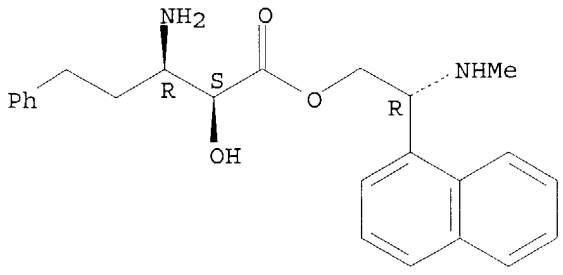
RN 656833-42-0 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, (2R)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester, (αS,βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



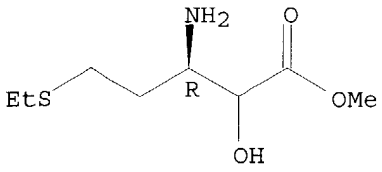
RN 656833-43-1 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4,5-trideoxy-5-phenyl-, (2R)-2-(methylamino)-2-(1-naphthalenyl)ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



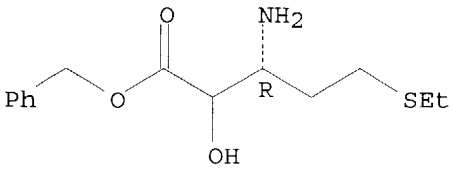
RN 656833-44-2 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



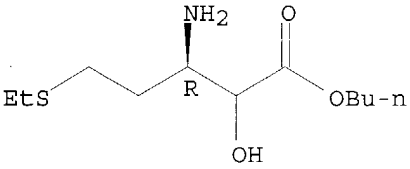

RN 656833-45-3 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, phenylmethyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



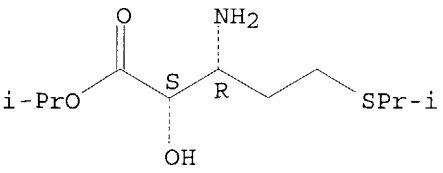

RN 656833-46-4 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, butyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



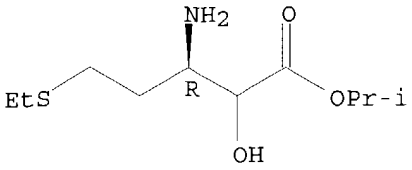

RN 656833-47-5 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



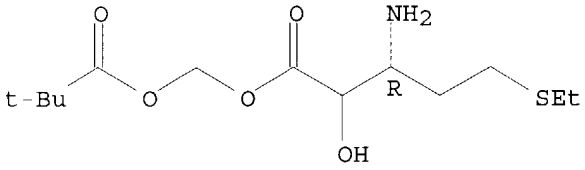

RN 656833-48-6 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, 1-methylethyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



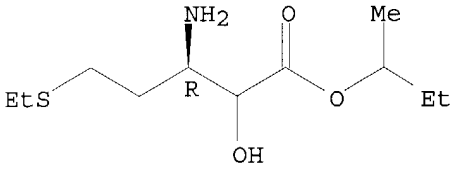
RN 656833-49-7 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2,2-dimethyl-1-oxopropoxy)methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



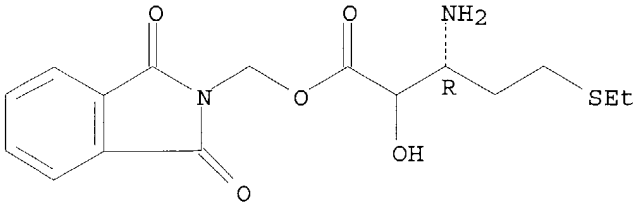
RN 656833-50-0 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, 1-methylpropyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



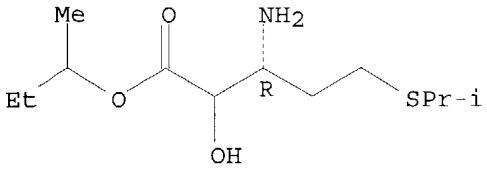
RN 656833-51-1 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



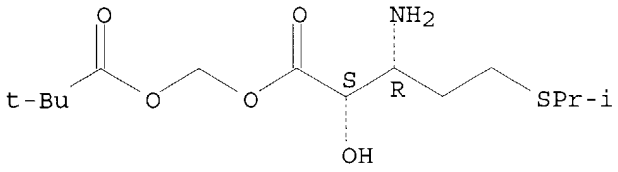
RN 656833-52-2 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, 1-methylpropyl ester, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



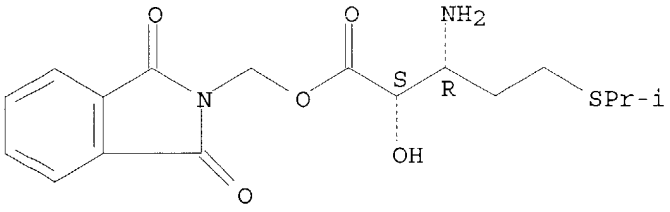
RN 656833-53-3 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, (2,2-dimethyl-1-oxopropoxy)methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



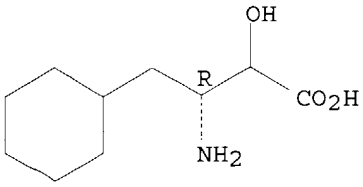
RN 656833-54-4 HCAPLUS
CN D-threo-Pentonic acid, 3-amino-3,4-dideoxy-5-S-(1-methylethyl)-5-thio-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 656833-88-4 HCAPLUS
CN Cyclohexanebutanoic acid, β-amino-α-hydroxy-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



AB Compds. β-amino acid derivs. H2NCHR1CH(OH)CO2R2 [R1 = alkyl, alkylsulfanylalkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocycle)alkyl, hydroxyalkyl; R2 = H, alkenyl, alkyl, alkylcarbonyloxyalkyl, alkylcarbonylalkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, heterocycle, (heterocycle)alkyl] or their therapeutically-acceptable salts are useful for treating conditions which

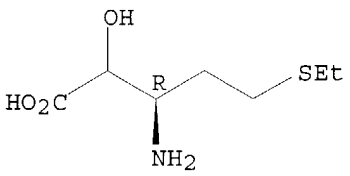
arise from or are exacerbated by angiogenesis. Also disclosed are pharmaceutical compns. comprising the compds., methods of treatment using the compds., methods of inhibiting angiogenesis, and methods of treating cancer. Thus, (2RS,3R)-3-amino-2-hydroxy-5-(methylsulfanyl)pentanoic acid was prepared

L85 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2002:11099 HCAPLUS
DOCUMENT NUMBER: 136:69597
TITLE: Synthesis of hydrazide and α-alkoxyamide angiogenesis inhibitors
INVENTOR(S): Craig, Richard A.; Kawai, Megumi; Lynch, Linda M.; Patel, Jyoti R.; Sheppard, George S.; Wang, Jieyi; Yang, Fan; Ba-Maung, Nwe
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 78 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2002002152 | A1 | 20020103 | US 2001-833917 | 20010412 |
| US 2004167126 | A1 | 20040826 | US 2004-782502 | 20040219 |
| PRIORITY APPLN. INFO.: | | | US 2000-197262P P | 20000414 |
| | | | US 2001-833917 A1 | 20010412 |

OTHER SOURCE(S): MARPAT 136:69597
IT **369360-56-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; synthesis of hydrazide and α-alkoxyamide angiogenesis inhibitors)
RN 369360-56-5 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2ξ)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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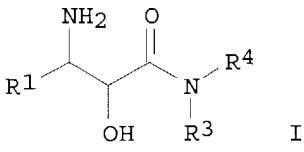


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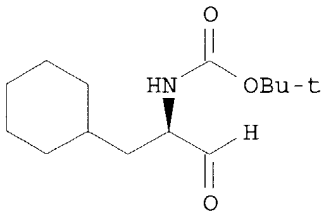
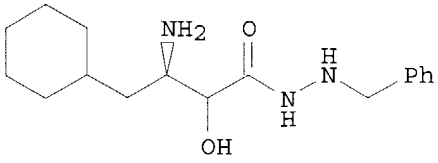



II




III

AB Title compds. I [R1 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocycle)alkyl, R5S-alkylene; R3 = H, alkyl, arylalkyl; R4 = NR6R7, OR8; R5 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl; R6-7 = H, alkanoyl, alkenyl, alkenyloxyalkyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylthioalkyl, aryl, arylalkanoyl, etc.; or R6-7 together are arylalkylidene; or R6-7 together with the nitrogen atom to which they are attached, form a heterocycle; R8 = H, alkanoylalkyl, alkenyl, alkoxycarbonylalkyl, alkyl, amidoalkyl, aryl, arylalkyl, etc.; R9-10 = H, alkyl, aryl] were prepared Over 450 synthetic examples were reported. For instance, (2R)-2-(Boc)amino-3-cyclohexylpropanoic acid was reduced to the corresponding alc. (PhMe, Red-Al, 0°C, room temperature 1 h) and oxidized to II (DMSO, Py•SO3, Et3N, room temperature 30 min). II was converted to the bisulfite addition product (H2O, NaHSO3, 5°C, 24 h) and reacted with KCN to give the α-hydroxy nitrile intermediate which was hydrolyzed to the carboxylic acid (12 N HCl, reflux, 21 h) and converted to III by condensation with benzylhydrazine (DCM/DMA, DIC, NMM, HOBt). Selected compds. I had IC50 < 0.1 μM for MetAP2. I are useful for inhibiting angiogenesis.

L85 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4

| | |
|---|---|
| ACCESSION NUMBER: | 1999:723016 HCAPLUS |
| DOCUMENT NUMBER: | 131:322917 |
| TITLE: | Preparation of substituted beta-amino acid as inhibitors of methionine aminopeptidase-2 and angiogenesis |
| INVENTOR(S): | Craig, Richard A.; Henkin, Jack; Kawai, Megumi; Lynch, Linda Lijewski; Patel, Jyoti; Sheppard, George S.; Wang, Jieyi |
| PATENT ASSIGNEE(S): | Abbott Laboratories, USA |
| SOURCE: | PCT Int. Appl., 153 pp.<br>CODEN: PIXXD2 |
| DOCUMENT TYPE: | Patent |
| LANGUAGE: | English |
| FAMILY ACC. NUM. COUNT: | 1 |

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| WO 9957098 | A2 | 19991111 | WO 1999-US9641 | | 19990430 |
| WO 9957098 | A3 | 20000727 | | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | | |
| CA 2329704 | AA | 19991111 | CA 1999-2329704 | | 19990430 |
| AU 9938778 | A1 | 19991123 | AU 1999-38778 | | 19990430 |
| EP 1073633 | A2 | 20010207 | EP 1999-921611 | | 19990430 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO | | | | | |
| US 6242494 | B1 | 20010605 | US 1999-303807 | | 19990430 |
| BR 9910092 | A | 20020122 | BR 1999-10092 | | 19990430 |
| JP 2002513781 | T2 | 20020514 | JP 2000-547068 | | 19990430 |
| NO 2000005506 | A | 20001229 | NO 2000-5506 | | 20001101 |
| BG 104981 | A | 20010731 | BG 2000-104981 | | 20001124 |
| PRIORITY APPLN. INFO.: | | | US 1998-71714 | A | 19980501 |
| | | | US 1999-303807 | A | 19990430 |
| | | | US 1998-83877P | P | 19980501 |
| | | | WO 1999-US9641 | W | 19990430 |

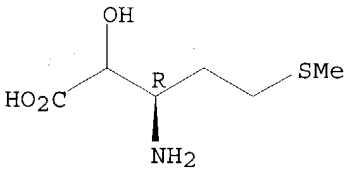
OTHER SOURCE(S): MARPAT 131:322917

IT **248928-74-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted β-amino acid as inhibitors of methionine aminopeptidase and angiogenesis)

RN 248928-74-7 HCAPLUS

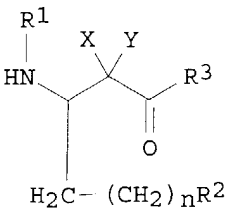
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-methyl-5-thio-, (2ξ)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.




1, 2, 3 I

~~GI~~




I

AB Substituted β-amino acids I [R1 = H, alkyl, carboxaldehyde, alkanoyl,

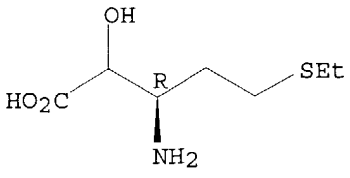
substituted alkyl ester; R2 = alkyl, cycloalkyl, (cycloalkyl)alkyl, substituted alkylthio ester, aryl, arylalkyl, substituted alkyl thio; R3 = aminoacyl, substituted alkylamine, cycloalkyl, aryl, ester, amide, heterocycle, substituted amine, sulfonylamine; X = OH, sulfhydryl; Y = H; XY = O, S; n = 0-2] were prepared as potent inhibitors of methionine aminopeptidase-2 and are thus, useful in inhibiting angiogenesis and disease conditions which depend upon angiogenesis for their development such as diabetic retinopathy, tumor growth, and conditions of inflammation. Pharmaceutical compds. containing the compds. and methods of inhibiting methionine aminopeptidase-2, and angiogenesis are also disclosed. Thus, (2RS,3S,1'S)-N-((1-ethoxycarbonyl)ethyl)-3-amino-2-hydroxy-5-(methylthio)pentanamide hydrochloride was prepared and tested as methionine aminopeptidase-2 inhibitor (IC50 = 11 μM).

L85 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:270148 HCAPLUS
DOCUMENT NUMBER: 139:2799
TITLE: Physiologically Relevant Metal Cofactor for Methionine Aminopeptidase-2 Is Manganese
AUTHOR(S): Wang, Jieyi; Sheppard, George S.; Lou, Pingping; Kawai, Megumi; Park, Chang; Egan, David A.; Schneider, Andrew; Bouska, Jennifer; Lesniewski, Rick; Henkin, Jack
CORPORATE SOURCE: Cancer Research, Advanced Technology, Global Pharmaceutical R & D, Abbott Laboratories, Abbott Park, IL, 60064, USA
SOURCE: Biochemistry (2003), 42(17), 5035-5042
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:2799

NPA

IT **369360-56-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methionine aminopeptidase-2 inhibitors with selectivity for metal cofactors show methionine aminopeptidase-2 is manganese-dependent enzyme)
RN 369360-56-5 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2ξ)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.




AB The identity of the physiol. metal cofactor for human methionine aminopeptidase-2 (MetAP2) has not been established. To examine this question, we first investigated the effect of eight divalent metal ions, including Ca2+, Co2+, Cu2+, Fe2+, Mg2+, Mn2+, Ni2+, and Zn2+, on recombinant human methionine aminopeptidase apoenzymes in releasing N-terminal methionine from three peptide substrates: MAS, MGAQFSKT, and 3H-MASK(biotin)G. The activity of MetAP2 on either MAS or MGAQFSKT was enhanced 15-25-fold by Co2+ or Mn2+ metal ions in a broad concentration range

(1-1000 μM). In the presence of reduced glutathione to mimic the cellular environment, Co2+ and Mn2+ were also the best stimulators (.apprx.30-fold) for MetAP2 enzyme activity. To determine which metal ion is physiol. relevant, we then tested inhibition of intracellular MetAP2 with synthetic inhibitors selective for MetAP2 with different metal cofactors. A-310840 below 10 μM did not inhibit the activity of MetAP2-Mn2+ but was very potent against MetAP2 with other metal ions including Co2+, Fe2+, Ni2+, and Zn2+ in the in vitro enzyme assays. In contrast, A-311263 inhibited MetAP2 with Mn2+, as well as Co2+, Fe2+, Ni2+, and Zn2+. In cell culture assays, A-310840 did not inhibit intracellular MetAP2 enzyme activity and did not inhibit cell proliferation despite its ability to permeate and accumulate in cytosol, while A-311263 inhibited both intracellular MetAP2 and proliferation in a similar concentration range, indicating cellular MetAP2 is functioning as a manganese enzyme but not as a cobalt, zinc, iron, or nickel enzyme. We conclude that MetAP2 is a manganese enzyme and that therapeutic MetAP2 inhibitors should inhibit MetAP2-Mn2+.

RETABLE

| Referenced Author (RAU) | Year (RPY) | VOL (RVL) | PG (RPG) | Referenced Work (RWK) | Referenced File |
|---|---|---|---|---|---|
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| Ash, D | 1982 | 257 | 9261 | J Biol Chem | HCAPLUS |
| Bazan, J | 1994 | 91 | 2473 | Proc Natl Acad Sci U | HCAPLUS |
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| Sin, N | 1997 | 1094 | 6099 | Proc Natl Acad Sci U | |
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| Turk, B | 1999 | 6 | 823 | Chem Biol | HCAPLUS |
| Walker, K | 1998 | 7 | 2684 | Protein Sci | HCAPLUS |
| Wang, J | 2000 | 77 | 465 | J Cell Biochem | HCAPLUS |
| Wilce, M | | 95 | 3472 | Proc Natl Acad Sci U | HCAPLUS |
| Yang, G | 2001 | 40 | 10645 | Biochemistry | HCAPLUS |
| Yocum, C | 1999 | 3 | 182 | Curr Opin Chem Biol | HCAPLUS |

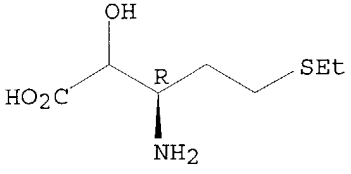
L85 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:780840 HCAPLUS
DOCUMENT NUMBER: 135:331197
TITLE: Synthesis of hydrazide and α-alkoxyamide angiogenesis inhibitors
INVENTOR(S): Craig, Richard A.; Kawai, Megumi; Lynch, Linda M.; Patel, Jyoti R.; Sheppard, George S.; Wang, Jieyi; Yang, Fan; Ba-Maung, Nwe Y.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 173 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001079157 | A1 | 20011025 | WO 2001-US12274 | 20010413 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1272456 | A1 | 20030108 | EP 2001-925029 | 20010413 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2001007204 | A | 20040225 | BR 2001-7204 | 20010413 |
| JP 2004509063 | T2 | 20040325 | JP 2001-576759 | 20010413 |
| PRIORITY APPLN. INFO.: | | | US 2000-549995 A | 20000414 |
| | | | US 2001-813008 A | 20010321 |
| | | | WO 2001-US12274 W | 20010413 |

OTHER SOURCE(S): MARPAT 135:331197
IT **369360-56-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; synthesis of hydrazide and α-alkoxyamide angiogenesis inhibitors)
RN 369360-56-5 HCAPLUS
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2ξ)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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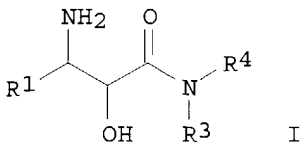
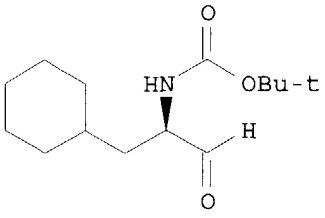
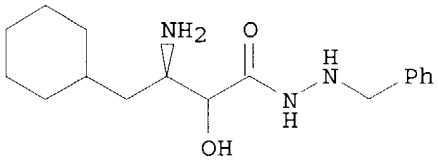



I




II




III

AB Title compds. I [R1 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocycle)alkyl, R5S-alkylene; R3 = H, alkyl, arylalkyl; R4 = NR6R7, OR8; R5 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl; R6-7 = H, alkanoyl, alkenyl, alkenyloxyalkyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylthioalkyl, aryl, arylalkanoyl, etc.; or R6-7 together are arylalkylidene; or R6-7 together with the nitrogen atom to which they are attached, form a heterocycle; R8 = H, alkanoylalkyl, alkenyl, alkoxycarbonylalkyl, alkyl, amidoalkyl, aryl, arylalkyl, etc.; R9-10 = H, alkyl, aryl] were prepared Over 450 synthetic examples were reported. For instance, (2R)-2-(Boc)amino-3-cyclohexylpropanoic acid was reduced to the corresponding alc. (PhMe, Red-Al, 0°C, room temperature 1 h) and oxidized to II (DMSO, Py•SO3, Et3N, room temperature 30 min). II was converted to the bisulfite addition product (H2O, NaHSO3, 5°C, 24 h) and reacted with KCN to give the α-hydroxy nitrile intermediate which was hydrolyzed to the carboxylic acid (12 N HCl, reflux, 21 h) and converted to III by condensation with benzylhydrazine (DCM/DMA, DIC, NMM, HOBt). Selected compds. I had IC50 < 0.1 μM for MetAP2. I are useful for inhibiting angiogenesis.

RETABLE

| Referenced Author (RAU) | Year (RPY) | VOL (RVL) | PG (RPG) | Referenced Work (RWK) | Referenced File |
|---|---|---|---|---|---|
| American Cyanamid Co | 1999 | | | WO 9942436 A | HCAPLUS |
| Merck Patent Gmbh | 2000 | | | DE 19831710 A | HCAPLUS |
| Zask, A | 1999 | | | US 5977408 A | HCAPLUS |

=> d ibib hitstr abs 7-
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L85 ANSWER 7 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2004:216017 USPATFULL
TITLE: Hydrazide and alkoxyamide angiogenesis inhibitors
INVENTOR(S): Craig, Richard A., Racine, WI, UNITED STATES
Kawai, Megumi, Libertyville, IL, UNITED STATES
Lynch, Linda M., Pleasant Prairie, WI, UNITED STATES
Patel, Jyoti R., Libertyville, IL, UNITED STATES
Sheppard, George S., Wilmette, IL, UNITED STATES

NRA

searched by D. Arnold 571-272-2532

Wang, Jieyi, Lake Bluff, IL, UNITED STATES
Yang, Fan, Highwood, IL, UNITED STATES
Ba-Maung, Nwe, Niles, IL, UNITED STATES
Searle, Xenia Beebe, Grayslake, IL, UNITED STATES

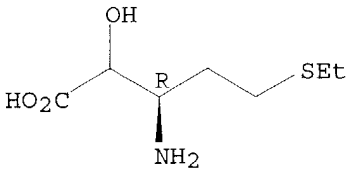
| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004167126 | A1 | 20040826 |
| APPLICATION INFO.: | US 2004-782502 | A1 | 20040219 (10) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-833917, filed on 12 Apr 2001, ABANDONED

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2000-197262P | 20000414 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STEVEN F. WEINSTOCK, ABBOTT LABORATORIES, 100 ABBOTT PARK ROAD, DEPT. 377/AP6A, ABBOTT PARK, IL, 60064-6008
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
LINE COUNT: 6859
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **369360-56-5P**
(intermediate; synthesis of hydrazide and α-alkoxyamide angiogenesis inhibitors)
RN 369360-56-5 USPATFULL
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-ethyl-5-thio-, (2ξ)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.




AB Compounds having the formula ##STR1##

are methionine aminopeptidase type 2 (MetAP2) inhibitors and are useful for inhibiting angiogenesis. Also disclosed are MetAP2-inhibiting compositions and methods of inhibiting angiogenesis in a mammal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L85 ANSWER 8 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2001:82819 USPATFULL
TITLE: Substituted β-amino acid inhibitors of methionine aminopeptidase-2
INVENTOR(S): Craig, Richard A., Racine, WI, United States
Henkin, Jack, Highland Park, IL, United States
Kawai, Megumi, Libertyville, IL, United States
Lynch, Linda M., Pleasant Prairie, WI, United States
Patel, Jyoti, Libertyville, IL, United States
Sheppard, George S., Willmette, IL, United States
Wang, Jieyi, Gurnee, IL, United States
PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

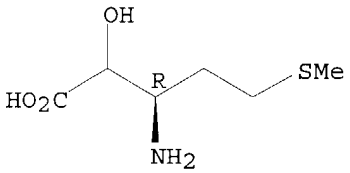
(U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6242494 | B1 | 20010605 |
| APPLICATION INFO.: | US 1999-303807 | | 19990430 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1998-83877P | 19980501 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Aulakh, C. S.
LEGAL REPRESENTATIVE: Donner, B. Gregory, Steele, Gregory W.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 5205
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **248928-74-7P**
(preparation of substituted β-amino acid as inhibitors of methionine aminopeptidase and angiogenesis)
RN 248928-74-7 USPATFULL
CN D-glycero-Pentonic acid, 3-amino-3,4-dideoxy-5-S-methyl-5-thio-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




AB A class of substituted b-amino acids are potent inhibitor of methionine aminopeptidase type 2 (MetAP2) and are thus useful in inhibiting angiogenesis and disease conditions which depend upon angiogenesis for their development such as diabetic retinopathy, tumor growth, and conditions of inflammation. Pharmaceutical compounds containing the compounds and methods of inhibiting methionine aminopeptidase-2, and angiogenesis are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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